

Abstract of the Disclosure

A gate oxide film is formed on a substrate. Next, gate interconnections, each including a first silicon film, a silicide film and a dielectric film, are formed on the gate oxide film. Next, an impurity is implanted into the substrate while the gate interconnections are taken as a mask, thereby forming a first diffusion layer. Next, a second silicon film is formed over the entire surface of the substrate so as to cover the gate interconnections. Next, the second silicon film is thermally oxidized, thereby forming a thermal oxide film. An interlayer dielectric film is formed on the thermal oxide film.